

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To
EXXONMOBIL RESEARCH AND ENGINEERING COMPANY
 Attn. Brumlik, Charles J.
 P.O.Box 900
 1545 Route 22 East
 Annandale, New Jersey 08801-0900
 UNITED STATES OF AMERICA

PCT

NOTIFICATION OF TRANSMITTAL OF
 THE INTERNATIONAL SEARCH REPORT
 OR THE DECLARATION

(PCT Rule 44.1)

RECEIVED

SEP 25 2003

EMRE LAW DEPT.

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Applicant's or agent's file reference P2001J067	Date of mailing <i>(day month year)</i> 23/09/2003
International application No. PCT/US 02/ 32760	International filing date <i>(day month year)</i> 15/10/2002
Applicant EXXONMOBIL RESEARCH AND ENGINEERING COMPANY	

1. The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46).

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report, however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO
 34, chemin des Colombettes
 1211 Geneva 20, Switzerland
 Facsimile No.: +41-22-740.14.35

For more detailed instructions, see the notes on the accompanying sheet

2. The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith

3. **With regard to the protest** against payment of an additional fee(s) under Rule 40(1), the applicant is notified that

the protest together with the decision on the same has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

no decision has been made yet on the protest, the applicant will be notified as soon as a decision is made

4. **Further action(s):** The applicant is reminded of the following

Shortly after **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid disclosure of the invention and to withdraw it from the international application, or if the priority claim, must reach the International Bureau as provided in Rules 16(1) and 16(3), respectively, before the completion of the technical preparations for international publication.

Within **19 months** from the priority date, the applicant must either withdraw the application or file a request for extension of the priority period by up to 12 months from the priority date, in accordance with Rule 17(1).

Within **20 months** from the priority date, the applicant must submit the prescribed fee to the International Bureau before it is charged. This will give the applicant time to demand and receive a refund of the fee paid from the priority date if and after the International Bureau grants a patent.

Name and address of the International Searching Authority EXXONMOBIL RESEARCH AND ENGINEERING COMPANY Attn. Brumlik, Charles J. P.O.Box 900 1545 Route 22 East Annandale, New Jersey 08801-0900	Name and address of the International Bureau WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland
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Name and address of the International Bureau
WIPO

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P2001J067	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 02/ 32760	International filing date (<i>day/month/year</i>) 15/10/2002	(Earliest) Priority Date (<i>day/month/year</i>) 13/11/2001
Applicant EXXONMOBIL RESEARCH AND ENGINEERING COMPANY		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :
 - contained in the international application in written form.
 - filed together with the international application in computer readable form.
 - furnished subsequently to this Authority in written form.
 - furnished subsequently to this Authority in computer readable form.
 - the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
 - the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. Certain claims were found unsearchable (See Box I).

3. Unity of invention is lacking (see Box II).

4. With regard to the title,

- the text is approved as submitted by the applicant.
- the text has been established by this Authority to read as follows:

5. With regard to the abstract,

- the text is approved as submitted by the applicant.
- the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

- as suggested by the applicant.
- because the applicant failed to suggest a figure.
- because this figure better characterizes the invention.

1

None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 02/32760

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 B01J38/00 C10G2/00 C07C1/04

According to International Patent Classification (IPC) or to the classification of the Office

B. FIELDS SEARCHED

Minimum documentation searched (classification system used, with classification symbols)

IPC 7 C10G C07C

Documentation searched other than minimum documented (to the extent that such documents are included in the fields searched)

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	WO 01 36352 A (CONOCO INC) 25 May 2001 (2001-05-25) page 8, last paragraph -page 9, paragraph 2; example 1 page 5, paragraph 1 page 7, paragraph 3 page 14, paragraph 1 ---	1-17
Y	US 5 817 702 A (BEHRMANN WILLIAM C ET AL) 6 October 1998 (1998-10-06) column 7, paragraph 1; claim 1 column 4, paragraph 1 ---	1-17
A	US 2 472 501 A (SWEETSER SUMNER B) 7 June 1949 (1949-06-07) column 3, paragraph 3; claim 1; figure 1 column 6, paragraph 1 ---	1,2,5-8, 13,14
		-/-

Further documents are listed in the continuation sheet

Patent family members are listed in the continuation sheet

Special categories of cited documents

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *B* earlier document but published on or after the international filing date
- *C* document which may later doubts, in particular, the priority which is used to establish the publication date of the citation or add a Special Case Code specified
- *D* document containing patent-like claims which are not patentable
- *E* document published prior to the earliest filing date of the international application, but which is cited in the continuation sheet

F later document published after the international filing date, or prior to, date and which is not with the application but cited to understand the principles of the invention underlying the invention

G document of particular relevance to the claimed invention, but cannot be considered as it is not cited to the document in the sheet where the document is cited, due to a lack of relevance

H document of particular relevance to the claimed invention, but cannot be considered to the document in the sheet where the document is cited with the same number as the document in the sheet, due to a lack of relevance

I document from which the citation is derived

J document of the same date as the citation

15 September 2003

23/09/2003

Patent document 15 SEP 2003
International Search Report
International Application No. PCT/US02/32760
Date of filing: 2002-03-04
Priority date(s): 2001-03-04
Name of inventor(s): GILLIQUET, J N

Gilliquet, J N

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 02/32760

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2 530 998 A (SCHARMANN WALTER G) 21 November 1950 (1950-11-21) column 7, paragraph 2; claims 1,2; example 1 ---	1-3,5-9, 13,14
A	US 5 844 005 A (FIATO ROCCO A ET AL) 1 December 1998 (1998-12-01) column 9, paragraph 2 column 6, line 45 - line 50 ---	1,13,16, 17
A	US 5 958 986 A (MART CHARLES JOHN ET AL) 28 September 1999 (1999-09-28) column 8, paragraph 3; claim 1; figure 1 ---	1,13,16, 17
A	EP 0 363 537 A (EXXON RESEARCH ENGINEERING CO) 18 April 1990 (1990-04-18) page 4, paragraph 3 -----	1,13

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 02/32760

International application number	Priority date	Publication date	Publication date
		Numbers	
WO 0136352	A 25-05-2001	US 6486220 E1 AU 2043401 A CA 2392177 A1 EP 1233938 A2 WO 0136352 A1 US 2002198096 A1	26-11-2002 30-05-2001 25-05-2001 28-08-2002 25-05-2001 26-12-2002
US 5817702	A 06-10-1998	AU 719923 B2 AU 7170398 A BR 9809377 A DE 69807860 D1 DE 69807860 T2 EP 0979255 A1 JP 2002512649 T NO 995333 A WO 9850486 A1 ZA 9803684 A	18-05-2000 27-11-1998 04-07-2000 17-10-2002 16-01-2003 16-02-2000 23-04-2002 20-12-1999 12-11-1998 06-11-1998
US 2472501	A 07-06-1949	NONE	
US 2530998	A 21-11-1950	NONE	
US 5844005	A 01-12-1998	AU 742415 B2 AU 7267898 A BR 9809382 A DE 69808751 D1 DE 69808751 T2 EP 0979257 A1 JP 2001524024 T TW 496856 B WO 9850485 A1 ZA 9803699 A	03-01-2002 27-11-1998 17-10-2000 21-11-2002 12-06-2003 16-02-2000 27-11-2001 01-08-2002 12-11-1998 06-11-1998
US 5958986	A 28-09-1999	AU 721351 B2 AU 7272098 A BR 9809353 A DE 69807507 D1 DE 69807507 T2 EP 1015523 A1 JP 2002512651 T TW 474838 B WO 9850490 A1 ZA 9803687 A	29-06-2000 27-11-1998 04-07-2000 02-10-2002 16-01-2003 05-07-2000 23-04-2002 01-02-2002 12-11-1998 06-11-1998
EP 0363537	A 18-04-1990	CA 1335446 C JP 2073023 A JP 2557959 B2 US 4794099 A AU 614777 B2 AU 2390683 A EP 0363537 A1	02-05-1995 13-03-1990 27-11-1996 27-12-1988 12-09-1991 26-04-1990 18-04-1990

